

CLAIMS

- NOT TO SCALE - DRAWING
1. A process for preparing particles for supporting a surfactant comprising burkeite, comprising the step of spray-drying a preparation liquid comprising an acrylic polymer, sodium carbonate and sodium sulfate, wherein the acrylic polymer has a weight-average molecular weight of 3000 to 100000, and wherein acrylic polymer has a size distribution, as determined by light scattering determination, such that a particle size of a larger particle size side at which a height of a peak corresponding to a particle size range covering a particle size of 10 nm attenuates to a half of a maximum value is 32 nm or less, and that a proportion of particles having a particle size exceeding 800 nm is 70% or less.
 - 10 2. The process for preparing particles for supporting a surfactant according to claim 1, wherein the acrylic polymer has a calcium ion capturing ability of 160 mg CaCO₃/g or more, and a stability constant to calcium ions of 2.6 or more.
 - 15 3. The process for preparing particles for supporting a surfactant according to claim 1 or 2, wherein the particles for supporting a surfactant have a composition in that the acrylic polymer is contained in an amount of from 5 to 30% by weight, that a total content of the sodium carbonate and sodium sulfate, as expressed by a weight ratio to the polymer content, of from 19/1 to 1/2, and that sodium carbonate and sodium sulfate are contained in a weight ratio of 1/10 to 10/1.
 - 20 4. The process for preparing particles for supporting a surfactant according

to any one of claims 1 to 3, wherein the acrylic polymer formulated in the preparation liquid is in a form of an aqueous solution having a quinone content of 6 ppm or less.

- 5 5. Particles for supporting a surfactant obtainable by the process of any one of claims 1 to 4, wherein the particles for supporting a surfactant have a mode diameter of a microporous capacity distribution of $1.5 \mu\text{m}$ or less as determined by mercury porosimeter for one having a micropore diameter of from 0.01 to $3 \mu\text{m}$, a microporous capacity of 0.3 mL/g or more for one having a micropore diameter of from 0.01 to $3 \mu\text{m}$, and a particle strength of from 15 MPa or more.
- 10 6. Particles for supporting a surfactant comprising burkeite, wherein an acrylic polymer is contained in an amount of 5 to 30% by weight, wherein the acrylic polymer has a weight-average molecular weight of 3000 to 100000, and wherein acrylic polymer has a size distribution, as determined by light scattering determination, such that a particle size of a larger particle size side at which a height of a peak corresponding to a particle size range covering a particle size of 10 nm attenuates to a half of a maximum value is 32 nm or less, and that a proportion of particles having a particle size exceeding 800 nm is 70% or less,
- 15 20 and wherein sodium carbonate and sodium sulfate are contained in a weight ratio of from 1/10 to 10/1, and wherein a total content of the sodium carbonate and sodium sulfate, as expressed by a weight ratio to the polymer content, of from 19/1 to 1/2.
- 25 7. The particles for supporting a surfactant according to claim 6, wherein the

acrylic polymer has a calcium ion capturing ability of 160 mg CaCO₃/g or more, and a stability constant to calcium ions of 2.6 or more.

8. Detergent particles comprising 10 to 100 parts by weight of a surfactant composition based on 100 parts by weight of particles for supporting a surfactant of any one of claims 5 to 7, wherein the surfactant composition is supported by the particles for supporting a surfactant.
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9. A detergent composition having an average particle size of 150 to 500 µm and a bulk density of from 500 to 1000 g/L, comprising the detergent particles of claim 8 in an amount of 50 to 100% by weight.
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